

Please amend the Abstract as follows:

ABSTRACT

A digital control apparatus for a switching DC-DC converter is described. ~~The converter comprises~~ includes at least one power transistor and is able to provide a regulated output voltage on a load. The apparatus ~~comprises~~ includes digital control ~~digital means~~ having ~~in input~~ a reference digital input signal and ~~being able to provide~~ provides a modulating signal to a PWM device; ~~the PWM device to which is~~ has in input the modulating signal and which provides an output square wave signal for driving the power transistor of ~~said the~~ DC-DC converter. ~~The apparatus comprises digital means able to operate on the square wave signal to obtain that it has a~~ such that there is non-linear modulation only when the value of a signal on the load is lower or higher than a prefixed value range of ~~said signal on the load~~.